

REF A41

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: **2001034074 A**

(43) Date of publication of application: **09.02.01**

(51) Int. Cl.

G03G 15/16

(21) Application number: **11202284**

(22) Date of filing: **15.07.99**

(71) Applicant: **SHIN ETSU POLYMER CO LTD**

(72) Inventor:
ODAJIMA SATOSHI
KAWAGUCHI TOSHIYUKI
HIBI TOYOJI

(54) **SEAMLESS BELT**

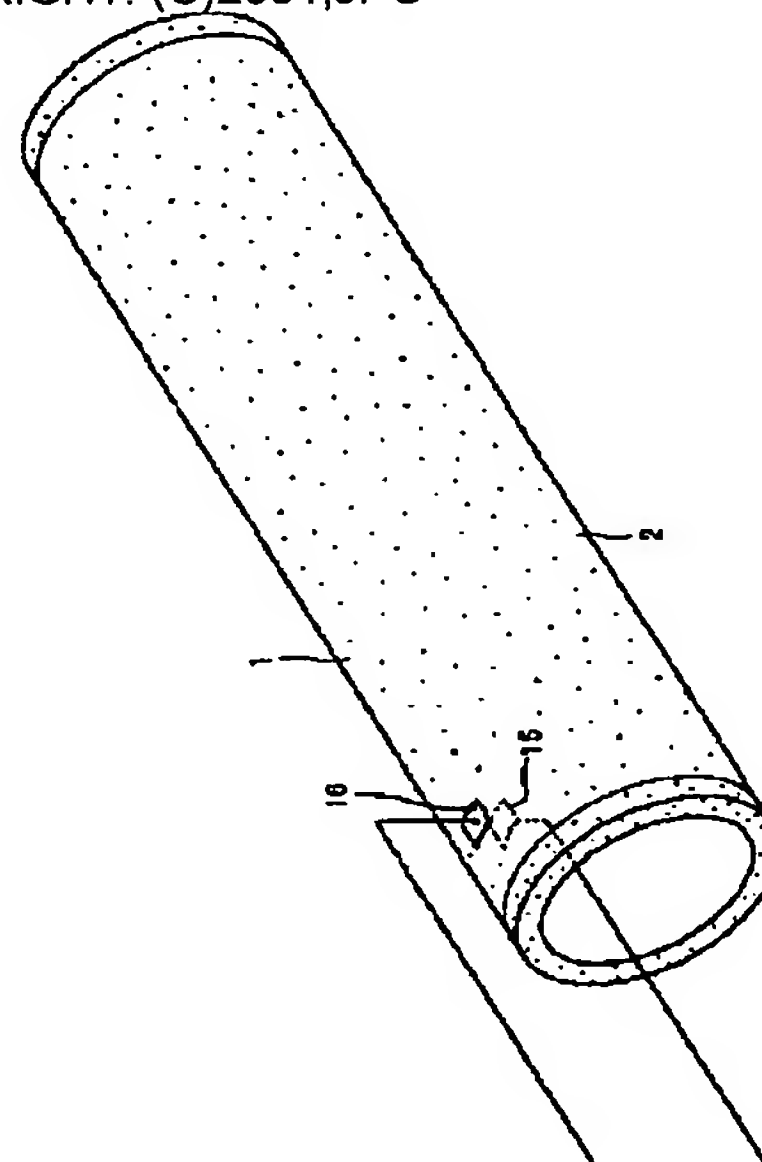
(57) Abstract:

PROBLEM TO BE SOLVED: To provide a seamless belt capable of enhancing the accuracy of an image by reducing the variance of a resistance value in a small area, and suppressing irregularities in an image.

SOLUTION: The intermediate transfer seamless belt 1 is obtained by adding and dispersing conductive filler in resin material, centrifugally molding the resin material so that the belt may be endless and with the thickness of 0.02 mm to 0.5 mm. And, an inside electrode 15 and an outside electrode 16 equal to or below 1 mm square are respectively brought into press contact with the surfaces on both outer and internal circumferential surfaces in an effective area 2 other than both end parts of the seamless belt 1 so as to be opposite to each other, and a DC voltage of 500 V is applied between the pair of the inside electrode 15 and the outside electrode 16, and in the case of measuring the resistance value in the whole effective area 2 while successively shifting the pair of the electrodes 15 and 16 by dimension, the maximum value of the

resistance values/the mean value of the resistance values is controlled to be ≤ 2 , and the mean value of the resistance value/the minimum value of the resistance values is controlled to be ≤ 5 .

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Derwent WPI

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013746320 **Image available**

WPI Acc No: 2001-230549/200124

XRPX Acc No: N01-164283

Endless seamless belt for electrophotographic copier, has pair of electrodes on effective area whose resistance value is changed based on size variations of electrodes

Patent Assignee: SHINETSU POLYMER KK (SHPL)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week

JP 2001034074 A 20010209 JP 99202284 A 19990715 200124 B

Priority Applications (No Type Date): JP 99202284 A 19990715

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 2001034074 A 8 G03G-015/16

Abstract (Basic): JP 2001034074 A

NOVELTY - A pair of electrodes (15,16) of 1mm size are placed on effective area of seamless belt, and DC voltage of 150 V is applied between them. The electrode size is varied and resistance value of effective area is measured. The ratio of maximum and mean resistance values is 2 or less than that of mean and minimum values is 5 or less.

USE - For use in electrophotographic copier, laser printer.

ADVANTAGE - The variations in resistance value are decreased, hence irregularity is prevented and high accuracy image is obtained.

DESCRIPTION OF DRAWING(S) - The figure shows the isometric view of seamless belt.

Electrodes (15,16)

pp; 8 DwgNo 1/7

Title Terms: ENDLESS; SEAM; BELT; ELECTROPHOTOGRAPHIC; COPY; PAIR; ELECTRODE; EFFECT; AREA; RESISTANCE; VALUE; CHANGE; BASED; SIZE; VARIATION; ELECTRODE

Derwent Class: P84; S06

International Patent Class (Main): G03G-015/16

File Segment: EPI; EngPI

Manual Codes (EPI/S-X): S06-A01A